

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1-13. (Cancelled)

14. (Currently amended) A system to allow an operator to control a plurality of medical devices during an endoscopic medical procedure, the system comprising:

a foot-operated control console ~~to allow an operator to control~~ for controlling the plurality of medical devices, the foot-operated control console ~~including~~ comprising:

a plurality of controls for operation by a foot of the operator, the plurality of controls including a selection control to allow the operator to select a medical device to be controlled from among the plurality of medical devices and a separate device control for manually operating the selected device;

a wireless transmitter to transmit over a wireless medium a selection signal responsive to operation of the selection control and a ~~first plurality of device control signal~~ signal responsive to operation of the ~~plurality of controls~~ device control;

~~a first controller to control the wireless transmitter in response to operation of the plurality of controls.~~

15. (Currently amended) A system as recited in claim 14, ~~wherein the system further includes~~ comprising a receiver unit separate from the control console, the receiver unit comprising ~~including~~:

a wireless receiver ~~to receive~~ for receiving the

selection signal and the ~~first plurality~~device control ~~signal~~signal via the wireless medium;

a data communication device ~~to transmit a second plurality of~~ for transmitting a selected device operating control signal compatible with the selected medical device to the selected medical device over a wired communication medium, wherein the selected device operating signal is based on the first plurality of control signal and the selection signal; and  
~~— a second controller to control the data communication device in response to the first plurality of control signals and the selection signal, including generating the second plurality of control signals based on the first plurality of control signals so that the second plurality of control signals are compatible with the selected device, as indicated by the selection signal.~~

16. (Currently amended) A system as recited in claim 15, wherein the foot-operated control console further includes:

a battery sealed within the foot-operated control console, ~~to power~~ for powering the foot-operated control console;

an induction element; and

a charging circuit to control charging of the battery by power electromagnetically induced in the induction element, wherein the wireless transmitter comprises an RF transmitter and the wireless receiver comprises an RF receiver.

17. (Currently amended) A system as recited in claim 16, wherein the system further comprises a charging station including:

a receptacle to receive the foot-operated control

console; and

an induction coil, coupled to a power supply, ~~to cause~~  
for charging the battery in the foot-operated control console  
~~to be charged inductively when the foot-operated control~~  
console is disposed in the receptacle.

18. (Original) A system as recited in claim 17, wherein the system further comprises a docking station that includes a receptacle to physically couple to the foot-operated control console.

19. (Currently amended) A system as recited in claim 18, wherein the charging station is an element of the docking station and the receiver unit is contained within the docking station.

20. (Currently amended) A system as recited in claim 18, ~~wherein the charging station is retractably coupled to the docking station~~ 15, wherein the foot-operated control console comprises one of a plurality of foot-operated control consoles, wherein each said control console includes a unique console identifier to permit the data communication device controller to identify each said control console.

21. (Currently amended) A system as recited in claim 18, ~~wherein the receiver unit is contained within the docking station~~ wherein the wireless medium comprises a short-range radio frequency and at least one of the plurality of medical devices comprises a cutting tool.

22. (Currently amended) A system as recited in claim 15,

wherein the foot-operated control console ~~further~~ includes a removable battery to power the foot-operated control console; and

wherein the system further comprises a charger to receive and charge the battery when the battery is removed from the foot-operated control console.

23. (Currently amended) A system as recited in claim ~~15~~14, wherein the ~~plurality of controls~~device ~~includes~~control comprises a foot pedal for providing the device control signal and the selection control comprises a foot switch.

24. (Currently amended) A system as recited in claim ~~15~~14, wherein the plurality of controls includes a plurality of foot pedals and a plurality of foot switches, wherein each of said foot pedals is capable of controlling different ones of said medical devices.

25. (Currently amended) A system as recited in claim 15, wherein ~~the first controller is configured to cause the~~ wireless transmitter is configured to transmit a ~~device~~an apparatus identifier in association with the ~~first~~ ~~plurality~~selection of control signalssignal, the ~~device~~apparatus identifier for associating the foot-operated control console ~~with~~at the receiver unit.

26. (Currently amended) A system as recited in claim 14, wherein the foot-operated control console further comprises a housing to contain the wireless transmitter ~~and the first controller~~, the housing having an attachment to allow a suction hose to be attached to the housing.

27. (Currently amended) An apparatus ~~to allow an operator to control~~for controlling a plurality of medical devices during an endoscopic medical procedure, the apparatus comprising:

a housing designed to be situated on a floor surface of an area in which the endoscopic medical procedure is performed during the ~~endoscopic~~ medical procedure;

a plurality of controls within the housing, designed to be operated by a foot of the operator to control the plurality of medical devices, the plurality of controls including a plurality of foot pedals and a plurality of foot switches, the plurality of foot switches including a selection switch ~~to allow the operator to select~~for selecting a medical device to be controlled from among the plurality of medical devices;

a wireless transmitter within the housing, to transmit over a wireless medium a device selection signal to cause a remote receiver unit to select the device to be controlled and ~~a first plurality of~~to transmit control signals to cause the remote receiver unit to control the selected medical device in response to operation of the controls; and

a ~~rechargeable~~ battery within the housing, ~~to power for~~ powering the foot-operated control console;

~~an induction coil within the housing; and~~

~~a charging circuit within the housing, coupled to the battery and the induction coil, to control charging of the battery by power induced in the induction coil by a source outside the housing.~~

28. (Currently amended) An apparatus as recited in claim 27, further comprising a transmitter controller within the housing, to control the wireless transmitter in response to operation of the controls, and to cause the wireless transmitter to transmit ~~a device~~an apparatus identifier in association with the control signals, the ~~device~~apparatus identifier for uniquely associating the apparatus with the

receiver unit.

29. (Currently amended) An apparatus as recited in claim 27, wherein the ~~apparatus further includes the receiver unit, and wherein the remote~~ receiver unit includes/comprises:

a wireless receiver to receive the selection signal and ~~the first plurality of control signals via the wireless medium, the control signals being a first plurality of control signals;~~

a data communication device to transmit a second plurality of control signals ~~to the selected device over a wired communication medium,~~ based on the first plurality of control signals ~~and the selection signal,~~ to the selected medical device over a wireless communication medium; and

a ~~second~~ controller to control the data communication device in response to the first plurality of control signals ~~and the selection signal,~~ including generating the second plurality of control signals based on the first plurality of control signals so that the second plurality of control signals are compatible with the selected medical device, ~~as indicated by the selection signal.~~

30. (Currently amended) An apparatus as recited in claim 27, wherein the housing has an attachment ~~to allow for attaching~~ a suction hose to ~~be attached to~~ the housing.

31. (New) A system for controlling a plurality of medical devices during an endoscopic medical procedure, the system comprising:

a plurality of medical devices for use in an endoscopic medical procedure;

a wireless foot-operated control console including at least one selection control switch for manually selecting the medical device to be controlled and at least one control pedal

for manually controlling the selected medical device, the foot-operated control console including a wireless transmitter for wirelessly transmitting a medical device selection signal provided by the selection control switch and for wirelessly transmitting medical device control signals provided by the control pedal; and

an apparatus for controlling a plurality of medical devices during an endoscopic medical procedure, the apparatus comprising a wireless receiver for receiving the wireless device selection signal and the medical device control signals from said control console, the receiver determining the selected medical device from the device selection signal, the receiver including a data communication device to provide operating control signals to the selected medical device in response to the medical device control signals.

32. (New) A system according to Claim 31, wherein the receiver is connected to the medical devices over a wired communication medium, and the wireless transmitter comprises an RF transmitter and the wireless receiver comprises an RF receiver.

33. (New) A system according to Claim 31, wherein the receiver is connected to the medical devices over a wireless communication medium.

34. (New) A system according to Claim 31, wherein the at least one selection control switch comprises one of a plurality of said selection control switches and the at least one control pedal comprises one of a plurality of said control pedals.

35. (New) A system according to Claim 34, wherein said plurality of medical devices comprises at least one of an electrocautery tool, a light source and a camera control unit.

36. (New) A system according to Claim 31, wherein said at least one control pedal comprises a variable displacement foot control for controlling at least one of speed, intensity, and variable settings for one of the medical devices.

37. (New) A system according to Claim 31, wherein said selection control switch for selecting a medical device is pressed repeatedly to cycle among the plurality of said medical devices.

38. (New) A system according to Claim 34, wherein said plurality of control pedals enable simultaneous control of first and second ones of said medical devices.

39. (New) A system according to Claim 27, wherein said battery comprises a rechargeable battery, said apparatus further comprising:

- an induction coil within the housing; and

- a charging circuit within the housing and coupled to the battery and the induction coil, said charging circuit being configured to charge the battery with power induced in the induction coil by a power source outside of the housing.

40. (New) A system for manually controlling a plurality of medical devices during an endoscopic medical procedure comprising:

- a plurality of medical devices; and

- a foot-operated control console comprising:

- a plurality of controls for operation by a foot of an operator, the plurality of controls including a



selection control for manual selection of a medical device to be controlled and a separate device control for manually operating the selected medical device;

a controller disposed in said housing for receiving inputs from said plurality of controls;

a wireless transmitter for receiving outputs from said controller and transmitting said outputs as a selection control signal for manual selection of a medical device and a device control signal for controlling the selected medical device;

a battery for providing power to said controller and said wireless transmitter; and

a wireless receiver for receiving wireless signals from another device and providing the wireless signals to said controller.

41. (New) A system according to claim 40, further comprising a receiver unit separate from the foot-operated control console for receiving the selection control signal and the device control signal from the wireless transmitter, the receiver unit providing the device control signal to the selected medical device for control thereof.

42. (New) A system according to claim 41, wherein the receiver unit provides the device control signal as a wireless signal to the selected medical device.

43. (New) A system according to claim 41, the receiver unit further comprising indicators for indicating the selected one of said plurality of medical devices.

44. (New) A system according to claim 43, wherein said receiver unit synchronizes with said foot-operated control console.

45. (New) A system according to Claim 44, wherein said receiver unit comprises a sync button and wherein the plurality of controls includes at least two switches, wherein simultaneous actuation of said synch button and said at least two switches synchronizes said console with said receiver unit.

46. (New) A system according to Claim 41, wherein the console has a unique console identifier so that the receiver unit is capable of identifying more than the one said control console.

47. (New) A system according to claim 40, wherein the wireless transmitter and the wireless receiver of the foot-operated control console comprise a transceiver.

48. (New) A system according to Claim 40, wherein the plurality of controls comprises at least one control switch for selecting the medical device to be controlled and at least one foot pedal for controlling the selected medical device.

49. (New) A system according to Claim 40, wherein said receiver for receiving wireless signals from another device receives information for modifying parameters or settings of the foot-operated control console from a transmitter unit disposed in the receiver unit.